

City of New York

OFFICE OF THE COMPTROLLER

Scott M. Stringer COMPTROLLER



MANAGEMENT AUDIT

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Deputy Comptroller for Audit

Audit Report on the Department of Parks and Recreation's Street Tree Pruning Program

MD13-107A

August 15, 2014

http://comptroller.nyc.gov



THE CITY OF NEW YORK OFFICE OF THE COMPTROLLER 1 CENTRE STREET NEW YORK, NY 10007

SCOTT M. STRINGER COMPTROLLER

August 15, 2014

Dear Residents of the City of New York:

My office has audited the Department of Parks and Recreation (DPR) to determine whether it had adequate controls over the street tree pruning engaged in by private vendors under contract with DPR. We perform audits such as this as a means of increasing accountability, ensuring that contractors provide services in accordance with their agreements, and to help ensure the safety of City residents.

This audit determined that DPR had inadequate controls over its street tree pruning process. Four of the five Borough Forestry Offices—the Bronx, Brooklyn, Manhattan, and Staten Island—had weaknesses that increased the risk that trees requiring pruning would not be pruned which increased the risk of injuries to people and property from falling limbs. In addition, DPR did not have adequate controls to ensure that it only paid for pruning services that were actually provided. Funds were used to pay for the erroneous pruning of undersized trees, which resulted in fewer trees that met the minimum diameter size requirement being pruned during that year. Furthermore, the Manhattan Forestry Office did not have any methodology in place to systematically track the streets that were pruned by the contractor, making it difficult for DPR to ensure that no streets have been omitted during a given pruning cycle.

To address these issues, the audit made six recommendations to DPR. Included among those recommendations are that DPR should: ensure that accurate, detailed lists of trees that meet the minimum size requirement and require pruning are prepared; ensure that post-pruning inspections are performed and documented; and ensure that the Manhattan Forestry Office tracks the streets that have been pruned by the contractor.

The results of the audit have been discussed with DPR officials, and their comments have been considered in preparing this report. Their complete written response is attached to this report.

If you have any questions concerning this report, please e-mail my audit bureau at audit@comptroller.nyc.gov.

Scott M. Stringer

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THE CITY OF NEW YORK OFFICE OF THE COMPTROLLER MANAGEMENT AUDIT

Audit Report on the Department of Parks and Recreation's Street Tree Pruning Program

MD13-107A

AUDIT REPORT IN BRIEF

This audit was conducted to determine whether the Department of Parks and Recreation (DPR) has adequate controls over the street tree pruning process engaged in by private vendors under contract with DPR. DPR's Forestry Division oversees its Street Tree Pruning Program¹ and is responsible for maintaining approximately 650,000 trees along City streets and parkways (street trees). The Forestry Division has a Borough Forestry Office in each of the five boroughs assigned to maintain the trees within its respective borough. This audit focused on street tree pruning performed by private contractors for trees of five inches in diameter or greater.

Pursuant to contracts with DPR, the contractor who plants the trees has initial responsibility for the care and maintenance of street trees for the first two years after they are planted. Thereafter, DPR personnel are responsible for emergency pruning of street trees and for pruning trees that are less than five inches in diameter. DPR enters into contracts with private vendors that require them to prune street trees that are five inches or greater in diameter.

Each year, DPR sets a goal for the number of street trees five inches in diameter or more to be pruned based on available funding, average pruning cost, and the previous year's performance. DPR estimates that at its current rate of operation, it will take between 10 to 12 years to prune all eligible trees in the current pruning cycle.

Audit Findings and Conclusions

DPR has inadequate controls over its street tree pruning process. Four of the five Borough Forestry Offices—the Bronx, Brooklyn, Manhattan, and Staten Island—have weaknesses that increase the risk that trees requiring pruning will not be pruned which increases the risk of injuries to people and property from falling limbs. As a result, there is also an increased risk of the City being held liable for any personal injuries and property damage that occurs.

We specifically found that the Manhattan and Staten Island Forestry Offices did not prepare detailed lists of trees requiring pruning for their contractors and did not have evidence that they

¹ The Street Tree Program is also known as the Block Pruning Program.

conducted post-pruning inspections of the contractors' work. We also found that the Brooklyn and the Bronx Forestry Offices erroneously included undersized trees in their lists that should not have been pruned pursuant to the pruning contracts. These findings are of particular concern because the absence of accurate lists of trees in need of pruning by the contractors hinders the Borough Offices' ability to direct and monitor the contractors' work. Furthermore, using funds to pay for the erroneous pruning of undersized trees means that trees that are five inches or greater in diameter that need pruning will not receive it during that year.

In addition, DPR does not have adequate controls to ensure that it is paying for pruning services that were actually provided. For instance, in the sample of trees in Manhattan and Staten Island we reviewed, 20 percent of funds paid to contractors were paid for trees that were either ineligible under the contract or did not appear to have been pruned at all. We also found that the Manhattan Forestry Office does not have a methodology in place to systematically track the streets where pruning was supposed to have been done by the contractor, making it difficult for DPR to ensure that no streets have been omitted during a given pruning cycle.

Audit Recommendations

To address the issues raised by this audit, we made six recommendations:

- DPR should ensure that accurate, detailed lists of trees that meet the minimum size requirement and require pruning are prepared, including the tree's specific location, and that these lists are provided to the contractors to direct their pruning.
- 2. DPR should ensure that post-pruning inspections are performed and documented, verifying the adequacy of the pruning and confirming pruned trees meet the contract specifications.
- 3. DPR should ensure that adequate reconciliations of the contractors' invoices are executed to make certain that payments are made only for trees meeting the contract specifications.
- 4. DPR should ensure that the Manhattan Forestry Office tracks the streets that have been pruned by the contractor to help ensure that no streets are missed and that all trees in need are pruned.
- 5. DPR should investigate and attempt to recoup the money that was paid for the trees that were less than five inches in diameter or that were not pruned.
- 6. DPR should refer to the Department of Investigation any evidence DPR finds of an intentional falsification of invoices by a contractor.

Agency Response

DPR officials agreed with the audit's recommendations but disagreed with the audit's finding that the agency has inadequate controls over its contract pruning program for street trees.

INTRODUCTION

Background

DPR maintains a municipal park system that encompasses more than 29,000 acres and contains approximately two million trees. In addition, another approximately 650,000 street trees are also under DPR's jurisdiction. DPR's Forestry Division oversees its Street Tree Pruning Program, which is responsible for maintaining the City's street trees. Within the Forestry Division, Borough Forestry Offices in each of the five boroughs are assigned to maintain the trees within their respective boroughs.

DPR contracts with private vendors for the initial care and maintenance of newly planted street trees. Pursuant to their contracts, the vendors are required to maintain the trees for the first two years after they are planted. After the initial two-year period, DPR personnel are responsible for emergency pruning and pruning trees less than five inches in diameter. Trees that are five inches or greater in diameter are to be pruned by tree pruning contractors hired by DPR.

DPR currently has five contracts (one for each borough) for pruning trees that are five or more inches in diameter and more than two years old. (See Appendix for a list of the tree pruning contractors during the audit scope period.) Each contract is negotiated separately by DPR's Purchasing and Accounting Department and the amount charged for pruning is based on the size of the trees governed by the contract.

The categories are as follows: Category 1 (five inches to under 12 inches); Category 2 (12 inches to under 20 inches); Category 3 (20 inches to under 27 inches); and Category 4 (27 inches and over).

According to the contracts, the directors of the Borough Forestry Offices are responsible for supplying the contractors with a list of trees to be pruned. The contractors are then required to mobilize their crews within five working days of receiving the list and remove dead or broken branches in order to improve penetration of street lighting and provide adequate clearance for vehicles, pedestrians, signs, buildings, and lights—all activities that will enhance public safety. DPR is responsible for inspecting all work to ensure compliance with contract specifications. The directors of the Borough Forestry Offices have final discretion to approve all work for payment.

Tree pruning is an essential component of DPR's mission to help ensure the health of the trees. According to the American National Standard for Tree Care Operations, which governs DPR's tree pruning program, tree pruning is done to reduce risk of tree failure, maintain and improve tree health and structure, and improve aesthetics. According to the United States Department of Agriculture's Forest Service's Urban Tree Risk Management guide, early formative pruning and ongoing maintenance pruning can prevent or eliminate many tree defects that are leading causes of tree failure and can also reduce the costs of subsequent pruning, tree removal, and replanting.

DPR officials said that the agency tries to prune as many trees as possible each year given available funding. Each year, DPR sets a goal for the number of trees to be pruned based on the average pruning cost, available funding, and the previous year's performance.

At the start of DPR's current pruning cycle in Fiscal Year 2008, DPR anticipated being able to prune every eligible tree approximately once every seven years, provided that the initial funding amount could be sustained each year. However, DPR officials said that due to budget reductions, it could not sustain a seven-year cycle, and is unable to set a fixed number of years for its pruning cycle. At its current rate of operation, DPR estimates it will take between 10 to 12 years to prune all eligible trees in the current pruning cycle.

The available funding is divided among the five Borough Forestry Offices by the Central Forestry Office based on the number of trees over five inches diameter at breast height (DBH)² as recorded from the 2005-2006 tree census³, as shown in the chart below:

	Number of trees with DBH of five inches or more recorded in the	Percentage of total population of trees with DBH of five
Borough	2005-2006 census	inches or more
Queens	204,825	41.8%
Brooklyn	120,750	24.6%
Bronx	50,321	10.2%
Manhattan	38,219	7.8%
Staten Island	76,302	15.6%
TOTAL	490,417	100.0%

According to DPR officials, a total of 46,697 trees were pruned via the block pruning contracts in Fiscal Year 2013. In the Fiscal Year 2013 Mayor's Management Report, DPR reported a target of 50,000 trees to be pruned for Fiscal Year 2014. The Preliminary Fiscal Year 2014 Mayor's Management Report reports an identical goal for Fiscal Year 2015.

Objective

To determine whether DPR has adequate controls over the contractor street tree pruning process.⁴

Scope and Methodology Statement

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. This audit was conducted in accordance with the audit responsibilities of the City Comptroller as set forth in Chapter 5, §93, of the New York City Charter.

The audit scope was July 1, 2012, to November 21, 2013. Please refer to the Detailed Scope and Methodology at the end of this report for the specific procedures and tests that were conducted.

² Diameter of a tree at breast height is measured at 4.5 feet above ground level.

³ In 2005, DPR conducted a census to count and list the City's street trees to create a baseline inventory.

⁴ The audit focused on street tree pruning performed by contractors and did not include the pruning of park trees or pruning conducted by in-house personnel, such as commitment pruning. Commitment pruning is done by in-house DPR personnel to resolve pressing issues, including trees blocking traffic signals or signs, dead tree removal, or storm-related emergencies.

Discussion of Audit Results with DPR

The matters covered in this report were discussed with DPR officials during and at the conclusion of this audit. A preliminary draft report was sent to DPR officials on May 6, 2014, and discussed at an exit conference held on May 22, 2014. We submitted a draft report to DPR officials on July 7, 2014 with a request for comments. We received a written response from DPR on July 22, 2014. In their response, DPR officials agreed with the audit's recommendations but stated that they "disagree with the Report's singular conclusion that Parks has inadequate controls over its contract pruning program for street trees that increase the City's legal liability for the risk of injuries to people and property from falling tree limbs."

Notwithstanding DPR's disagreement with our assessment of its controls over contract pruning, we are pleased that the agency has agreed to implement the audit's recommendations, which we believe is a significant step in correcting the deficiencies identified in this audit.

The full text of the DPR response is included as an addendum to this report.

FINDINGS AND RECOMMENDATIONS

DPR has inadequate controls over its street tree pruning process. Although the Borough Forestry Offices generally have procedures in place that govern the selection, tracking, inspection, and payment to street tree pruning contractors, we identified weaknesses in the operations of four of the five Borough Forestry Offices: the Bronx, Brooklyn, Manhattan, and Staten Island.

As a result of these weaknesses, there is an increased risk that trees requiring pruning will not receive it, and as a result, an increased risk of property damage and personal injury from falling limbs. In addition, DPR does not have adequate controls to ensure that it is paying for pruning services that were actually provided.

Two or more boroughs had the following deficiencies:

- detailed lists of trees requiring pruning were either not prepared or included trees that should not have been pruned pursuant to the contracts;
- no evidence of post-pruning inspections being performed to confirm the adequacy of the contractors' work; and
- reconciliations of vendor invoices to ensure that the contractors are appropriately paid were either inadequate or were not performed at all.

Table I summarizes the issues we identified in the Borough Forestry Offices.

Table I
Summary of Issues Identified in the Five Borough Forestry Offices

Identified Issues	Queens	Bronx	Brooklyn	Manhattan	Staten Island
Inaccurate or No List Prepared by DPR of Trees Requiring Pruning		Х	Х	Х	Х
Inadequate or No Evidence of Post- Pruning Inspections to Confirm Work Performed				Х	Х
Inadequate Reconciliations or No Evidence of Reconciliation of Vendor Invoices		Х		Х	Х
Trees Pruned that are Less than Five Inches DBH		Х	Х	Х	Х
TOTAL	0	3	2	4	4

In addition to the above-mentioned weaknesses, we also found that the Manhattan Forestry Office lacks a methodology to systematically track the streets where pruning was supposed to

have been done by the contractor, making it difficult for DPR to ensure that no streets have been omitted in a given pruning cycle.

We did not identify any weaknesses in the Queens Forestry Office's operations, which is responsible for 41.8 percent of the eligible street trees among the five boroughs. The controls put in place by Queens Forestry Office appeared to be functioning and could be used as a guide to assist the other four borough offices.

These issues are discussed in greater detail in the following sections of the report.

Inaccurate or No List Prepared by DPR of Trees Requiring Pruning

The Manhattan and Staten Island Forestry Offices failed to provide tree pruning contractors with detailed lists of trees having a DBH of at least five inches that require pruning notwithstanding a requirement in each contract that they do so. Additionally, the lists prepared by the Brooklyn and Bronx Forestry Offices included trees of less than five inches DBH, which pursuant to the contracts and to DPR rules, should not have been pruned by these contractors.

Rather than providing the contractors with lists identifying the specific trees that required pruning and their locations, the Manhattan and Staten Island Forestry Offices merely provided the contractor with a list or highlighted map of streets to prune. Without detailed lists, DPR has no assurance that only eligible trees (those with a DBH of five inches or more) that required pruning were in fact pruned. In addition, as discussed later in the report, without detailed lists, the Manhattan and Staten Island Forestry Offices are not able to perform a meaningful reconciliation of the contractors' invoices to ensure proper payment.

We also found that the lists that the Brooklyn and Bronx Forestry Offices prepared and gave to the contractors included trees that did not meet the minimum size requirement of five inches DBH as specified in the contracts. As discussed later in the report, our field observations identified trees that, although the Brooklyn and Bronx Forestry Offices included them on the lists as having a DBH of at least five inches, were actually smaller in size. These trees should not have been included on the list that purported to identify trees for the contractors to prune and should not have been pruned by the contractors.

It is important for DPR to provide accurate detailed lists of trees that require pruning, including their specific location, and ensure that only trees that meet the minimum size requirements are on these lists. These lists provide the contractors with clear direction as to which trees they are required to prune, assure DPR that only eligible trees are pruned, and provide DPR with the necessary information to verify that it is only paying for pruning authorized by DPR.

Recommendation

 DPR should ensure that accurate, detailed lists of trees that meet the minimum size requirement and require pruning are prepared, including the trees' specific locations, and that these lists are provided to the contractors to direct their pruning. **DPR Response:** "Accepted. All contractors now receive consistent and detailed lists of trees to be pruned that conform to the Report's recommendation."

No Evidence that Required Post-Pruning Inspections Were Performed in Manhattan and Staten Island

Multiple Borough Forestry Offices failed to document post-pruning inspections that are meant to ensure that contractors meet all contract terms. Indeed, the audit found that, of the sample reviewed, 20 percent of funds paid to contractors in Manhattan and Staten Island was paid for pruning of trees that were either not eligible under the contract or did not appear to have been pruned at all.

According to the pruning contracts entered into for each of the five boroughs, DPR "shall conduct inspections of all work to ensure compliance with the contract's specifications." Officials for all five borough offices said that post-pruning inspections are performed to confirm the adequacy of the contractors' work.

However, there was no evidence of these post-pruning inspections for two boroughs: Manhattan and Staten Island. Officials from the Manhattan and Staten Island Borough Forestry Offices said that the post-pruning inspections are conducted but not documented. Therefore, we cannot confirm that these inspections were, in fact, made.

Furthermore, as part of our observations of trees billed by the contractors working in Manhattan and Staten Island, we identified undersized trees that had been pruned and trees that did not appear to have been pruned at all, yet DPR paid for these prunings. These findings indicate that, to the extent any post-pruning inspections are being performed by these two boroughs, they are insufficient to provide meaningful oversight over the Street Tree Pruning Program. This is a particular concern because both the Manhattan and Staten Island Borough Forestry Offices were found to have not prepared lists for the contractors that indicated specifically which trees DPR sought to have pruned.

Based on our observations of a sample of 195 trees in Manhattan and Staten Island for which DPR was billed for pruning, we identified 48 (25 percent) that were either undersized or did not appear to have been pruned. Specifically, we found that:

- Of the 105 trees observed in Manhattan, 23 trees (22 percent) were undersized and six (6 percent) did not appear to have been pruned; and
- Of the 90 trees observed in Staten Island, 12 (13 percent) were undersized and seven (8 percent) did not appear to have been pruned.

DPR records show that DPR paid the contractors \$10,970 for the sampled tree prunings. However, 20 percent of the total, \$2,206, was paid for trees pruned that were not eligible under the contract or for trees that did not appear to have been pruned at all. Accordingly, those payments are questionable. Money paid to contractors for work they should not have done or where they failed to do work at all reduces the amount of funds available for pruning eligible trees. This is not just a waste of City resources, but also raises the potential for falling limbs, putting both public safety and public funds at risk.

Recommendation

2. DPR should ensure that post-pruning inspections are performed and documented, verifying the adequacy of the pruning and confirming pruned trees meet the contract specifications.

DPR Response: "Accepted. Post pruning inspections that document that all trees have been pruned to contract specifications are performed in all boroughs."

Inadequate Controls to Prevent Payments for Ineligible Trees

No Evidence that Vendor Invoices Were Reconciled in Manhattan and Staten Island

The audit found no evidence that the Manhattan and Staten Island Forestry Offices were performing reconciliations⁵ of vendor invoices before payments were made to ensure that contractors were paid only for eligible trees that were adequately pruned. However, according to Comptroller's Directive 1, *Principles of Internal Control*, a sound internal control system must be supported by ongoing activity monitoring, including reconciliations.

Further, because neither the Manhattan nor Staten Island Forestry Offices prepared detailed lists of trees to be pruned nor documented post-pruning inspections to confirm the adequacy of the work performed, the offices lacked the tools to render accurate reconciliations. In fact, the Manhattan Forestry Office does not have a methodology for systematically tracking the streets where trees have been pruned by the contractor. Unlike the other Borough Offices, which maintain color-coded and numbered maps to identify the streets where pruning was conducted, the Manhattan Forestry Office does not maintain a document that clearly identifies which street trees have been pruned. Without systematically tracking the streets being pruned, DPR's ability to determine whether all streets within Manhattan were pruned during a given cycle is significantly hindered.

Although the Manhattan Forestry Office Director said that reconciliations of the invoices are performed, without a detailed list and evidence of post-pruning inspections, a proper reconciliation cannot be performed.

In addition, our review of the sampled payments made for the Manhattan Forestry Office for invoices received for the months of January 2013, February 2013, and May 2013 (paid in February 2013, April 2013, and June 2013, respectively) raised further doubts about whether that office adequately reconciled invoices. Of the 2,363 prunings billed by the contractor for the payments reviewed, we identified 99 trees that the contractor expressly recorded as having a DBH of three or four inches. If a review had been performed by the Manhattan Forestry Office, these trees would have been easily identified as improperly included on the invoice. When we brought this to the attention of the Manhattan Director, he informed us he had no knowledge of the contractor pruning trees less than five inches DBH, although he had signed the *Invoice Verification & Approval Form* authorizing the payments that included these prunings. The

⁵ Reconciliations would involve DPR comparing the list of trees on the vendors' invoices with the list of trees on DPR's pruning list to ensure that all of the invoiced trees were on DPR's list and ensure that DPR does not pay for any prunings that its own post-pruning inspections determined were deficient.

Manhattan Forestry Office subsequently informed us that the contractor was instructed to stop pruning trees less than five inches DBH and informed that such pruning will not be authorized for payment.

Upon our further inquiry regarding this issue, the Manhattan Director informed us that the contractor agreed to reimburse the City for this error. However, the Manhattan Forestry Office only identified a total of 72 trees that were less than five inches DBH during their review of prunings that took place between January 2013 and June 2013. The Manhattan Forestry Office's review included two invoices (April 2013 and July 2013) that were not part of our sample and did not include one invoice (January 2013) that was included in our review. The January 2013 invoice alone had 53 trees that were less than five inches DBH that were not included in the amount being reimbursed by the contractor. Therefore, it appears that DPR should be recouping more than the \$2,880 (pruning bill for the 72 trees) that the agency identified.

Vendor Invoice Reconciliations in the Bronx Were Inadequate; Brooklyn Vendor Reconciliations Revealed Only a Small Number of Errors

Based on a sampling of documents, we found that the reconciliations performed by the Bronx Forestry Office were inadequate. Our review of two sampled Bronx invoices found that of the 1,928 prunings billed, DPR paid for 243 prunings (13 percent) without adequate verification and support. In one instance, DPR provided the contractor with a list of 734 trees to be pruned, but the contractor billed for an additional 11 trees (745 in total) on the related invoice. In addition, based on our review of post-pruning inspection documents relating to the other invoice, there was no evidence that DPR inspected 232 trees to confirm that they were adequately pruned.

Our review of the sampled Brooklyn invoices revealed some errors, but in an amount that does not raise significant issues concerning the office's reconciliation process. For the 2,789 prunings billed, we found that only 57 (2 percent) were paid without adequate verification and supporting documentation.

After we informed DPR officials of the errors and issues we identified with the sampled payments for the Bronx and Brooklyn Forestry Offices, DPR conducted inspections to confirm that the trees were pruned. DPR officials responded, "Bronx Forestry performed a second (formal) inspection . . . to verify and document that the pruning work was completed for the trees in question" and "Brooklyn Forestry confirmed that many of the trees not marked as inspected prior to the payment were in fact pruned."

Trees Less than Five Inches DBH Were Pruned By Contractors and Paid for By DPR

Our audit found that four Borough Forestry Offices—the Bronx, Brooklyn, Manhattan and Staten Island—paid contractors to prune trees less than five inches DBH. However, according to the tree pruning contracts, only trees that are at least five inches DBH should have been pruned by the contractors. This contract based-restriction was confirmed with DPR's Deputy Chief of Central Forestry.

Contrary to the terms of the pruning contracts, both the Brooklyn and Bronx Forestry Offices affirmatively included trees less than five inches DBH on the lists of trees to be pruned that they

gave to their contractors. Based on our observations of a sample of trees from the lists given to the contractors by the Brooklyn and Bronx Forestry Offices, we found that 35 trees (18 percent) of the 190 trees observed in Brooklyn and 36 trees (14 percent) of the 257 trees observed in the Bronx were identified by DPR personnel as five inches DBH, but were actually smaller. The pruning of trees by contractors that are less than five inches DBH would not likely be identified through the reconciliation process because these undersized trees were erroneously included in the lists provided to the contractors of trees to prune and the post-pruning inspections conducted as part of the reconciliation process are focused more on verifying that the invoiced trees were adequately pruned than on verifying that they were appropriately sized.

As noted above, Manhattan and Staten Island did not provide lists to contractors specifically identifying what trees they were to prune. Our observations revealed 23 trees (22 percent) of the 105 trees observed in Manhattan and 12 trees (13 percent) of the 90 trees observed in Staten Island were less than five inches DBH, but DPR paid for the prunings. The above-mentioned 23 trees we observed in Manhattan were all pruned in October 2013, which was after we were informed that the Manhattan Forestry Office specifically instructed the contractor to stop pruning trees less than five inches DBH. Rather than recording the actual size of the undersized trees as we found that the contractor had previously done, the contractor recorded these trees as being five inches DBH or above. Because, as discussed above, the Manhattan Forestry Office did not appear to perform post-pruning reconciliations, the misstatements in the invoices were not discovered. The apparent change in the contractor's practice raises questions about whether there was an intentional attempt to conceal the fact that undersized trees had been pruned in violation of the contract terms. This question needs to be examined more closely and if intentional falsifications of records are found to have occurred, appropriate actions should be taken by all relevant authorities.

In sum, four of the five DPR Borough Forestry Offices have not established adequate controls over their tree pruning contracts to ensure that DPR paid only for work actually performed by the contractors for trees of five inches DBH or more, as set forth in their contracts.

Overall Impact

Our field observations for a sample of trees that were reportedly pruned revealed a total of 106 (17 percent) of the 642 trees in the Bronx, Brooklyn, Manhattan, and Staten Island were undersized and so should not have been pruned pursuant to the pruning contracts. Based on the average amount billed by contractors to prune trees in these four boroughs, we estimate that 51 to 112 additional trees of sufficient size could have been pruned, as shown in the chart below.

	Average	Amount paid for	Number of additional
	pruning cost	ineligible prunings of	trees that could have
	per tree*	sampled trees	been pruned
Category	A	В	C (B÷A)
1	\$ 37.50	\$ 4,230	112
2	\$ 55.38	\$ 4,230	76
3	\$ 65.75	\$ 4,230	64
4	\$ 81.75	\$ 4,230	51

^{*}Average cost for Brooklyn, the Bronx, Manhattan, and Staten Island combined

As noted previously, DPR informed us that, due to fiscal constraints, it could no longer maintain a fixed tree pruning schedule. As a result, prunings are conducted for far fewer trees per year

than were once considered optimal for the health of the trees and for the safety of the public. DPR reported that 46,697 trees were pruned by tree pruning contractors in Fiscal Year 2013. If the conditions we found in our sample are similar to conditions that exist citywide, DPR may be expending significant resources to pay contractors to prune ineligible trees.

By imposing appropriate controls over its contract management and its payment process, DPR could increase the total number of trees pruned that actually need to be pruned. This would minimize the risk of property damage or personal injury occurring as a result of trees not receiving the necessary pruning in a timely manner, while also ensuring that contractors are only paid for work within the scope of their contracts.

Recommendations

- 3. DPR should ensure that adequate reconciliations of the contractors' invoices are executed to make certain that payments are made only for adequately pruned trees meeting the contract specifications.
 - **DPR Response:** "Accepted. Contractor invoices are carefully reconciled to ensure payments are made in conformance with the contract specifications."
- 4. DPR should ensure that the Manhattan Forestry Office tracks the streets that have been pruned by the contractor to help ensure that no streets are missed and that all trees in need are pruned.
 - **DPR Response:** "Accepted. Manhattan Forestry tracks and documents all work performed by tree pruning contractors."
- 5. DPR should investigate and attempt to recoup the money that was paid for the trees that were less than five inches DBH or that were not pruned.
 - **DPR Response:** "Accepted. DPR will review and attempt to recoup payments for pruned trees that were less than 5" in diameter."
- 6. DPR should refer to the Department of Investigation any evidence DPR finds of an intentional falsification of invoices by a contractor.
 - **DPR Response:** "In the event that Parks finds intentional falsification of invoice by a contractor, we will refer the matter to the City's Department of Investigation."

DETAILED SCOPE AND METHODOLOGY

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. This audit was conducted in accordance with the audit responsibilities of the City Comptroller as set forth in Chapter 5, §93, of the New York City Charter.

The audit scope was July 1, 2012, to November 21, 2013.

To obtain an understanding of the policies, procedures, and regulations relied on by DPR and governing DPR's Street Tree Pruning Program, we reviewed and used as criteria:

- The American National Standard for Tree Care Operation
- The American National Standard for Arboricultural Operations (Safety)
- The Street Tree Pruning Program overview
- DPR's Block Pruning Contracts

To further our understanding of the Street Tree Pruning Program's operations and the related controls that were significant to our audit objective, we interviewed the Deputy Chief of Forestry for Horticulture & Natural Resource Group (the Central Forestry Office) and the Tree Preservation Director. We also interviewed all five Borough Forestry Directors and the two Deputy Forestry Directors (in Queens and Brooklyn) to obtain an understanding of DPR's street tree pruning process, including the current street tree pruning cycle, the methodologies for allocating funds to each borough, and the identification of trees requiring pruning.

To ensure that DPR paid only for eligible trees that were adequately pruned, we judgmentally selected a sample of invoices that were paid before and after March 2013 (the month the audit was initiated) and reviewed the corresponding payment files in the Bronx, Brooklyn, Manhattan, Queens, and Staten Island Forestry Offices to determine whether there were adequate controls over payments and evidence of a proper reconciliation.

We obtained and reviewed the *Invoice Verification & Approval Forms*, the contractors' invoices (including the lists of trees pruned), and, when available, DPR-prepared lists of trees that were provided to the contractor, documents showing DPR's post-inspections of prunings, and records documenting DPR's reconciliations.

As part of our review, we compared the invoiced trees with the DPR-prepared lists, where such lists existed, to ensure that only trees referred for pruning by DPR were pruned by the contractors. In addition, we compared the post-pruning inspection results with the invoiced trees to ensure that payments were not made for trees that did not pass DPR's post-pruning inspections. Further, we recalculated the invoiced amounts to ensure that the proper payments were made to the contractors.

We conducted field observations in the Bronx, Brooklyn, Manhattan, Queens, and Staten Island and judgmentally selected a sample of trees that had been recorded as being recently pruned at the time of our observations to verify that the trees were pruned. Our field observations were

conducted from October 24, 2013, to November 21, 2013. We looked to see that there were no underlying issues still present, such as low hanging branches, dead wood, and branches that were too close to houses. In addition, we measured trees to ensure that they met the size requirement of five inches DBH. When we identified trees that did meet the size requirement for pruning, we obtained the invoices from the Borough Forestry Offices to determine whether the contractor billed and was paid for the pruning of these trees.

The Appendix illustrates the associated vendor for the selected samples and the total sample size for the payment review and tree observations for each of the five boroughs.

APPENDIX

List of Block Pruning Vendors, Associated Tests, and Sample

Borough	Vendor Name	Contract Term		Sampled Tests				
	Volidor Hamic	Start Date	End Date	Payment Review			Observations	
				Payment Dates	Amount Billed	Number of Trees Billed	Observation Date	Number of Trees Observed
Queens	Lewis Tree Service, Inc.	8/13/2012	8/12/2013	2/19/2013	\$ 55,423	1,047	10/24/2013	123
				2/26/2013	\$ 30,231**	605		
				4/15/2013	\$158,979**	2,870		
	Dom's Lawn Maker, Inc.*	11/1/2013	10/31/2015	N/A	N/A	N/A	10/24/2013	92
Brooklyn	Lewis Tree Service, Inc.	11/16/2011	1/31/2013	2/11/2013	\$ 54,550	947	N/A	N/A
	Dragonetti Brothers Landscaping Nursery & Florist, Inc.*	2/1/2013	1/31/2015	6/4/2013	\$ 114,202**	1,842	11/19/2013	190
Bronx	Bartlett Tree Experts	11/30/2011	1/31/2013	1/28/2013	\$ 21,300	745	N/A	N/A
	Beucleur Tree Experts, LLC*	2/1/2013	1/31/2015	4/30/2013	\$ 58,180	1,183	11/21/2013	257
Manhattan	Bartlett Tree Experts, LLC	11/30/2011	1/31/2013	2/4/2013	\$ 36,466	722	N/A	N/A
	Bartlett Tree Experts, LLC* (Renewal)	2/1/2013	1/31/2015	4/3/2013 6/4/2013	\$ 28,800 \$ 44,260	643 998	11/20/13	105
Staten	Beucleur Tree Experts, LLC	3/29/2011	3/28/2013	1/7/2013	\$ 58,259.50	1,232	N/A	N/A
Island				4/3/2013	\$53,606.50	1,173		
	Beucleur Tree Experts, LLC* (Renewal)	3/29/2013	3/28/2014	N/A	N/A	N/A	10/30/13	90

^{*}These contracts were in effect in February 2014, the conclusion of our audit testing.

^{**}These payments also included park trees which were not included in the audit tests.



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City of New York Parks & Recreation

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July 22, 2014

Ms. Marjorie Landa
Deputy Comptroller for Audit
The City of New York
Office of the Comptroller
1 Centre Street, New York, NY

Re: Draft Audit Report on the effectiveness of the Department of Parks and Recreation's Street Tree Pruning Program, MD13-107A

Dear Deputy Comptroller Landa:

Thank you for the opportunity for the New York City Department of Parks & Recreation ("Parks" or the "Agency") to review and respond to the above referenced Draft Audit Report (the "Report").

As a first matter, we disagree with the Report's singular conclusion that Parks has inadequate controls over its contract pruning program for street trees that increase the City's legal liability for the risk of injuries to people and property from falling tree limbs. As a whole, our contract pruning program for street trees minimizes the risk of injuries to people and damage to property from falling limbs. While we believe there is room for improvement to the program, and we have made program improvements during this engagement, the Report should recognize the positive impact this program has on neighborhoods throughout the five boroughs.

The borough forestry offices currently have consistent and effective oversight controls in place and staff from each borough are assigned to each contractor performing the street tree pruning in order to quickly provide clear directions for work and address problems when they arise. In fact, in fiscal year 2014, through May, we have already pruned over 57,000 trees and will exceed our fiscal year 2014 goal by approximately 10,000 trees. Our planned, systematic maintenance approach increases the longevity of public trees and improves the safety of New Yorkers. Central Forestry, Horticulture, and Natural Resources works continuously to incorporate the most current best management practices throughout our operation and have routinely revised the contract specifications to account for the latest advances in not only arboricultural practices, but risk management and tree preservation. Furthermore, the Forestry division received additional funding in the FY14 and FY15 adopted City budgets that allowed Parks to hire additional foresters to support the tree pruning process.

Recommendation 1. DPR should ensure that accurate, detailed lists of trees that meet the minimum size requirement and require pruning are prepared, including the tree's specific location, and that these lists are provided to the contractors to direct their pruning.

Accepted. All contractors now receive consistent and detailed lists of trees to be pruned that conform to the Report's recommendation.

Recommendation 2. DPR should ensure that post-pruning inspections are performed and documented, verifying the adequacy of the pruning and confirming pruned trees meet the contracted specifications.

Accepted. Post pruning inspections that document that all trees have been pruned to contract specifications are performed in all boroughs.

Recommendation 3. DPR should ensure that adequate reconciliations of the contractors' invoices are executed to make certain that payments are made only for trees meeting the contract specifications.

Accepted. Contractor invoices are carefully reconciled to ensure payments are made in conformance with the contract specifications.

Recommendation 4. DPR should ensure that the Manhattan Forestry Office tracks the streets that have been pruned by the contractor to help ensure that no streets are missed and that all trees in need are pruned.

Accepted. Manhattan Forestry tracks and documents all work performed by tree pruning contractors.

Recommendation 5. DPR should investigate and attempt to recoup the money that was paid for the trees that were less than five inches in diameter or that were not pruned.

Accepted. DPR will review and attempt to recoup payments for pruned trees that were less than 5" in diameter.

Recommendation 6. DPR should refer to the Department of Investigation any evidence DPR finds of the intentional falsification of invoices by a contractor.

In the event that Parks finds intentional falsification of invoice by a contractor, we will refer the matter to the City's Department of Investigation.

Finally, we thank your audit staff for their time and effort toward completing this Report.

Sincerely,

Liam Kavanagh